

**REMARKS**

Claims 1 and 3-19 have been examined. The Examiner indicates that the objections to the claims and to the specification have been withdrawn. Also, the Examiner indicates that the arguments with respect to claims 1 and 3-19 have been considered but are moot in view of new grounds of rejection. In particular, claims 1 and 3-19 are rejected under 35 U.S.C. § 112, first paragraph.

**I. Claim Rejections - 35 U.S.C. § 112**

Claims 1 and 3-19 are rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. In particular, the Examiner asserts that claim 1, for example, recites:

the output of a left additional channel is produced using the signal of the left stereo channel and the signal of the center channel, and excludes using the signal of the right stereo channel and a signal of a right surround channel, and

the output of a right additional channel is produced using the signal of the right stereo channel and the signal of the center channel, and excludes using the signal of the left stereo channel and a signal of a left surround channel,

for which the information regarding the above mentioned limitations could not be found in the originally filed specification. Applicants respectfully disagree with the Examiner's position for the following reasons.

The present specification discloses that outputs of the TV set speakers (i.e., left additional channel and right additional channel, or left speaker of the TV set and right speaker of the TV set) are output such that the downmixed outputs are calculated using equations provided in

**the present invention** (paragraphs 30 and 36, steps 330 and 540, respectively). In particular, paragraph 51 of the present specification recites:

The TV speaker output producer 840 produces a downmixed output of a left speaker of a TV set and a downmixed output of a right speaker of the TV set using a signal of the left stereo channel, a signal of the right stereo channel and a signal of the center channel produced by the multi-channel sound producer 830 using equations 1 and 2 or equations 4 and 7. (emphasis added)

For example, equation 1 and equation 4 recite:

$$L_{tv} = 0.7 * \{a * L + (1 - a) * C\} \quad (1)$$

$$L_{tv} = 0.7 * \{(0.3 + a) * L + (1 - a) * C\} \quad (4)$$

According to equation (1), the left speaker of the TV set ( $L_{tv}$ ) is calculated according to the left stereo channel and the center channel. Thus, the right stereo channel, the right surround channel and the left surround channel are excluded from equation (1). In other words, the signals of the right stereo channel, the right surround channel and the left surround channel are not used in calculating the output of the left speaker of the TV set. Also, according to equation (4), the signal of the right stereo channel and the signal of the right surround channel are not used in calculating the output of the left speaker of the TV set. Thus, these signals are excluded from the output of the left speaker of the TV set. A similar logic follows from equations (2) and (7) with respect to the right speaker of the TV set. In contrast, paragraph 28 of the present specification includes equations of related art that do not exclude the right and left surround channels from the calculated output of the speakers of the TV set.

In view of the above, it is clear that equations (1) and (4) exclude using the signal of the right stereo channel and a signal of a right surround channel, as recited in claim 1. In addition,

equations (2) and (7) exclude using the signal of the left stereo channel and a signal of a left surround channel.

Although newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure the subject matter of the claim need not be described literally (i.e., using the same terms or *in haec verba*) in order for the disclosure to satisfy the description requirement. (MPEP 2163 and 2163.02). Applicants submit that the features added in the Amendment filed on May 21, 2008 are supported at least implicitly, if not expressly, by the specification. The fundamental factual inquiry is whether the specification conveys with reasonable clarity to those skilled in the art that, as of the filing date sought, applicant was in possession of the invention as now claimed (See, e.g., *Vas-Cath, Inc.*, 935 F.2d at 1563-64, and MPEP 2163). Applicants also note that the Examiner has the initial burden, after a thorough reading and evaluation of the content of the application, of presenting evidence or reasons why a person skilled in the art would not recognize that the written description of the invention provides support for the claims (MPEP 2163).

Applicants submit that at least paragraphs 30, 36, 51 and equations (1)-(8) of the specification convey with reasonable clarity to those skilled in the art that the features of claim 1 are described in the specification as originally filed. Therefore, the rejection to claim 1 should be withdrawn.

In addition, Applicants request that the rejections to independent claims 3, 10 and 15 should be withdrawn for similar reasons. For example, claim 3 recites:

wherein the output of the left speaker of the TV set is produced using the signal of the left stereo channel and the signal of the center channel, and excludes using a signal of the left surround channel and a signal of a right surround channel; and

the output of the right speaker of the TV set is produced using the signal of the right stereo channel and the signal of the center channel, and excludes using the signal of the right surround channel and the signal of a left surround channel.

Therefore, these features are disclosed at least by equations (1) and (2) of the specification as set forth above in conjunction with claim 1. Claims 10 and 15 also contains similar features, and thus, are described in the specification for analogous reasons.

The rejections to the remaining claims should be withdrawn based on their respective dependencies.

Since the rejection under 35 U.S.C. § 112 is the only rejection that remains, and the claims are not rejected in view of any cited art, Applicants submit that the claims are in a condition for allowance.

## **II. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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